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have any numbers.

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order that Acrobat
assigns it.

McGRAW-EDISON

Onan

Parts
Manual

BF
GenSet

RV Electric Generating Set

GENERAL INFORMATION

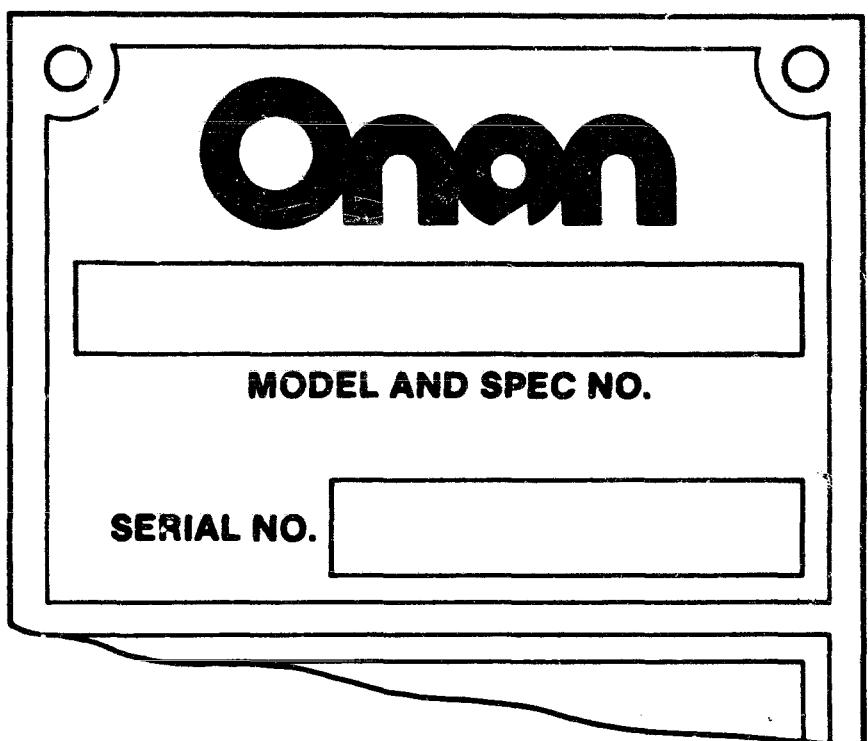
INSTRUCTIONS FOR ORDERING REPAIR PARTS

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, please furnish all information requested.

Always refer to the nameplate on your unit.

1. Always give the MODEL, SPEC NO. and SERIAL NO.



M-1149

For handy reference, insert "YOUR" nameplate information in the spaces above.

2. Do not order by reference number; always use part number and description.
3. Give the part number, description and quantity needed of each item. If an older part cannot be identified, return the part prepaid to your dealer or nearest Onan Parts and Service Center. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
4. State definite shipping instructions. Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

Prices are purposely omitted from this Parts Catalog due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center.

"En esta lista de partes los precios se omiten de propósito, ya que bastante confusión resultó de fluctuaciones de los precios, derechos aduaneros, impuestos de venta, cambios extrajeros, etc."

Consiga los precios vigentes de su distribuidor de productos "ONAN."

PARTS CATALOG

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INTRODUCTION

This catalog applies to the standard Recreational Vehicle Generator Sets as listed below. Parts are arranged in groups of related items. Each illustrated part is identified by a reference number corresponding to the same reference number in the parts list for that group. Parts illustrations are typical. Using the Model and Spec No. from the nameplate, select parts from this catalog that apply to your set. Unless otherwise mentioned in the description, parts are interchangeable between models. Right and left sides are determined by facing the engine end (front) of the set.

DATA TABLE

MODEL AND SPEC NO.	TYPE	WATTS	VOLTS	HERTZ	WIRE	PHASE
3.0 BF-53CR/*	Remote	3000	120/240	50	4**	1
4.0 BF-3CR/*	Remote	4000	120/240	60	4**	1

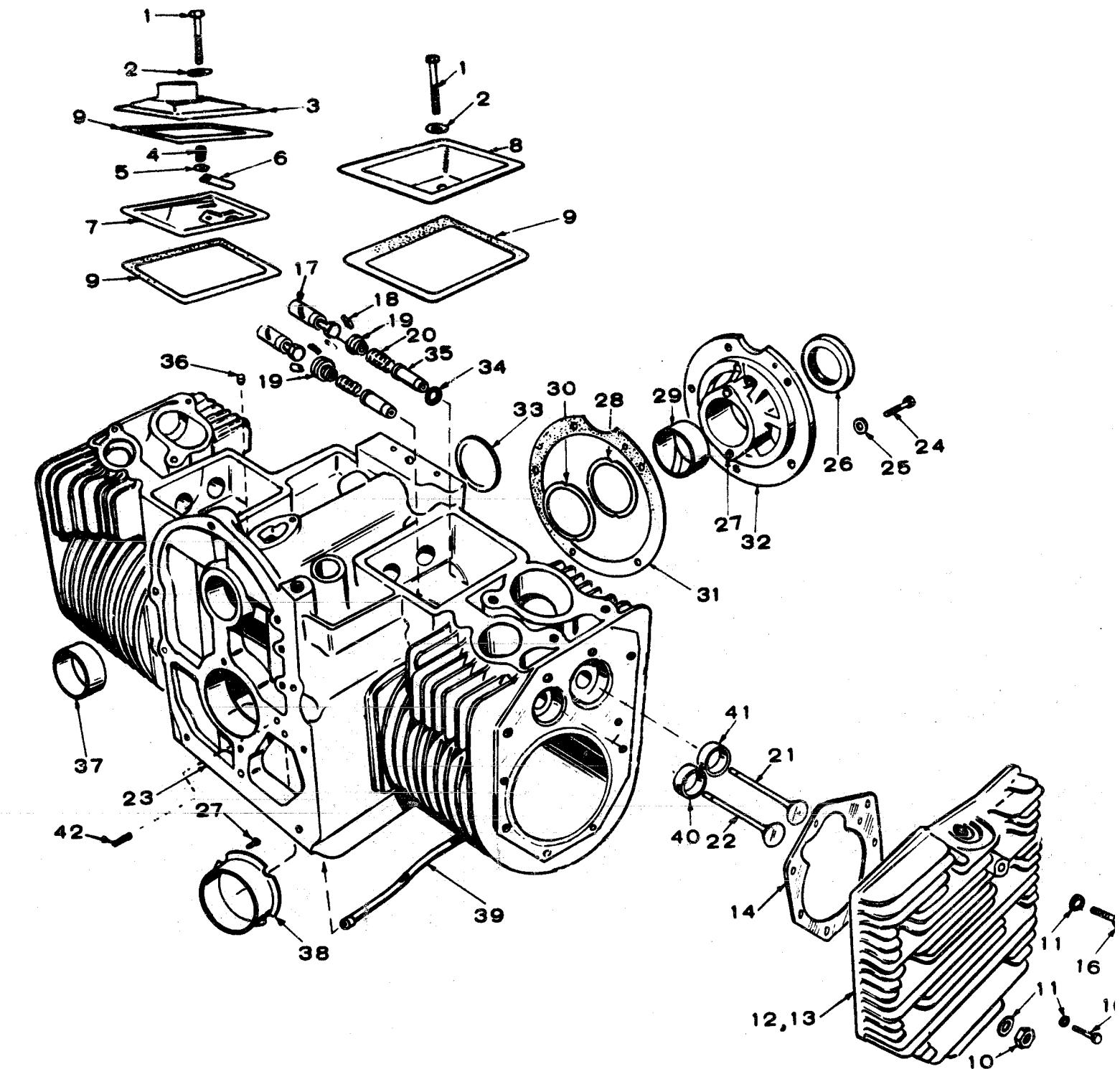
* - The Specification Letter advances (A to B, B to C, etc.) with manufacturing changes.

** - Set is reconnectible for 120 volt, 2 wire; 240 volt, 2 wire; or 120/240 volt, 3 wire service.

NOTICE!

ITEMS REFERENCED AS OPTIONAL INDICATE PART IS FACTORY INSTALLED AND MAY NOT BE APPLICABLE TO ALL MODELS. FOR FIELD CONVERSIONS ADDITIONAL PARTS ARE USUALLY REQUIRED.

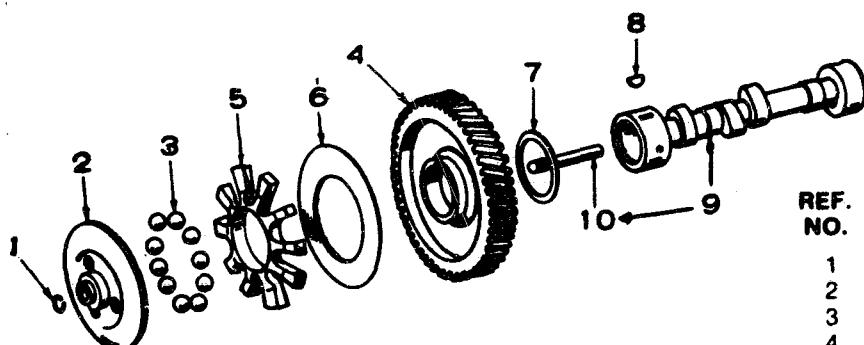
CYLINDER BLOCK



CYLINDER BLOCK

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0010	2	Screw, Cap - Hex Head '1/4-20 x 1-3/4")	29	BEARING, SLEEVE - CRANKSHAFT, REAR (Includes Thrust Washer)		
2	526-0063	2	Washer, Flat - Copper (1/4")	101-0450		1	†Standard
3	110-2274	1	Cover, Valve - With Breather Port	101-0450-02		1	.002" Undersize
4	123-1174	1	Spring, Breather Valve	101-0450-10		1	.010" Undersize
5	526-0018	1	Washer, Flat (17/64" I.D. x 5/8" O.D. x 1/16" Thk)	101-0450-20		1	.020" Undersize
6	123-1175	1	Reed, Breather Valve	101-0450-30		1	.030" Undersize
7	123-1173	1	Baffle, Breather Valve	30	104-0575	2	†Washer, Thrust
8	110-1879	1	Cover, Valve	31	101-0415	1	†Gasket, Bearing Plate
9	110-1921	3	Gasket, Valve Cover	32	101-0439	1	†Plate, Bearing - Rear
10	110-0445	18	Nut, Hex - Hardened (5/16-24) Used on early Spec A Models	33	517-0013	1	†Plug, Expansion - Welch
11	526-0122	18	Washer, Flat (11/32" ID x 23/32" OD x 0.1345" Thk)	34	110-0068	2	†Gasket - Intake Valve Guide
12	110-1924	1	Head, Cylinder - Right Side	35	110-1935	4	†Guide, Valve
13	110-1925	1	Head, Cylinder - Left Side	36	517-0120	1	†Plug, Vacuum Tube Port
14	110-1920	2	Gasket, Head	37	101-0405	2	†Bearing, Sleeve - Camshaft
16	SCREW, CAP - HEX HEAD			38	BEARING, SLEEVE - CRANKSHAFT, FRONT		
	800-0540	12	5/16-18 x 1-5/8" - Grade 8	101-0432		1	†Standard
	800-0541	6	5/16-18 x 2" - Grade 8	101-0432-02		1	.002" Undersize
17	TAPPET, VALVE			101-0432-10		1	.010" Undersize
	115-0006	4	Standard	101-0432-20		1	.020" Undersize
	115-0006-01	4	.001" Oversize	101-0432-30		1	.030" Undersize
	115-0006-02	4	.002" Oversize	39	120-0706	1	†Tube, Oil - Crankcase
	115-0006-05	4	.005" Oversize	40	INSERT, VALVE SEAT - EXHAUST		
18	110-0639	8	Lock, Valve Spring	110-0245		2	†Standard
19	110-0904	4	Rotocap, Valve	110-0245-02		2	.002" Oversize
20	110-0539	4	Spring, Valve	110-0245-05		2	.005" Oversize
21	110-1808	2	Valve, Intake	110-0245-10		1	.010" Oversize
22	110-1809	2	Valve, Exhaust	110-0245-25		2	.025" Oversize
23	110-2354	1	Block Assembly, Cylinder (Includes Parts Marked †)	41	INSERT, VALVE SEAT - INTAKE		
24	800-0051	5	†Screw, Cap - Hex Head (3/8-16 x 1-1/4")	110-0197		2	†Standard
25	850-0050	5	†Washer, Lock - Spring (3/8)	110-0197-02		2	.002" Oversize
26	509-0041	1	†Seal, Oil - Crankshaft, Rear	110-0197-05		2	.005" Oversize
27	516-0072	4	†Pin, Drive - Bearing Stop	110-0197-10		2	.010" Oversize
28	104-0776	As Req.	†Shim (.005") Crankshaft	110-0197-25		2	.025" Oversize
				42	516-0141	2	†Pin, Hear Cover Alignment
							† - Included in Cylinder Block Assembly.
							* - Flanged bearing replaces thrust washer and the unflanged front crankshaft bearing.

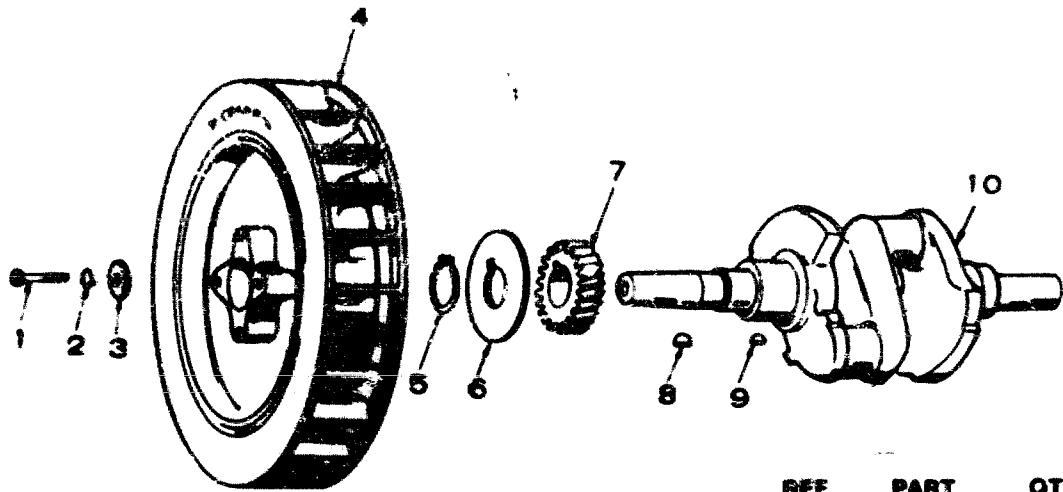
CAMSHAFT



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	150-0078	1	Ring, Retaining
2	150-1116	1	Cup, Governor
3	510-0015	10	Ball, Governor
4	105-0332	1	Gear Camshaft (Includes Parts Marked †)
5	150-1257	1	†Spacer, Flyball
6	150-0077	1	†Plate, Flyball
7	105-0004	1	Washer, Thrust
8	515-0001	1	Key, Cam Gear
9	105-0376	1	Camshaft (Includes Center Pin)
10	150-0075	1	Pin, Center - Camshaft

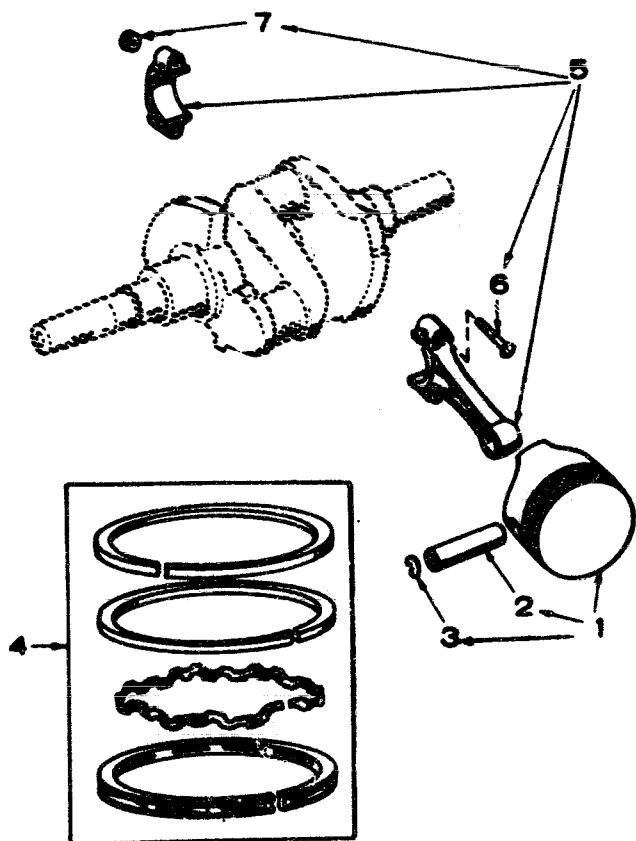
† - Parts included in Camshaft Gear.

CRANKSHAFT AND FLYWHEEL



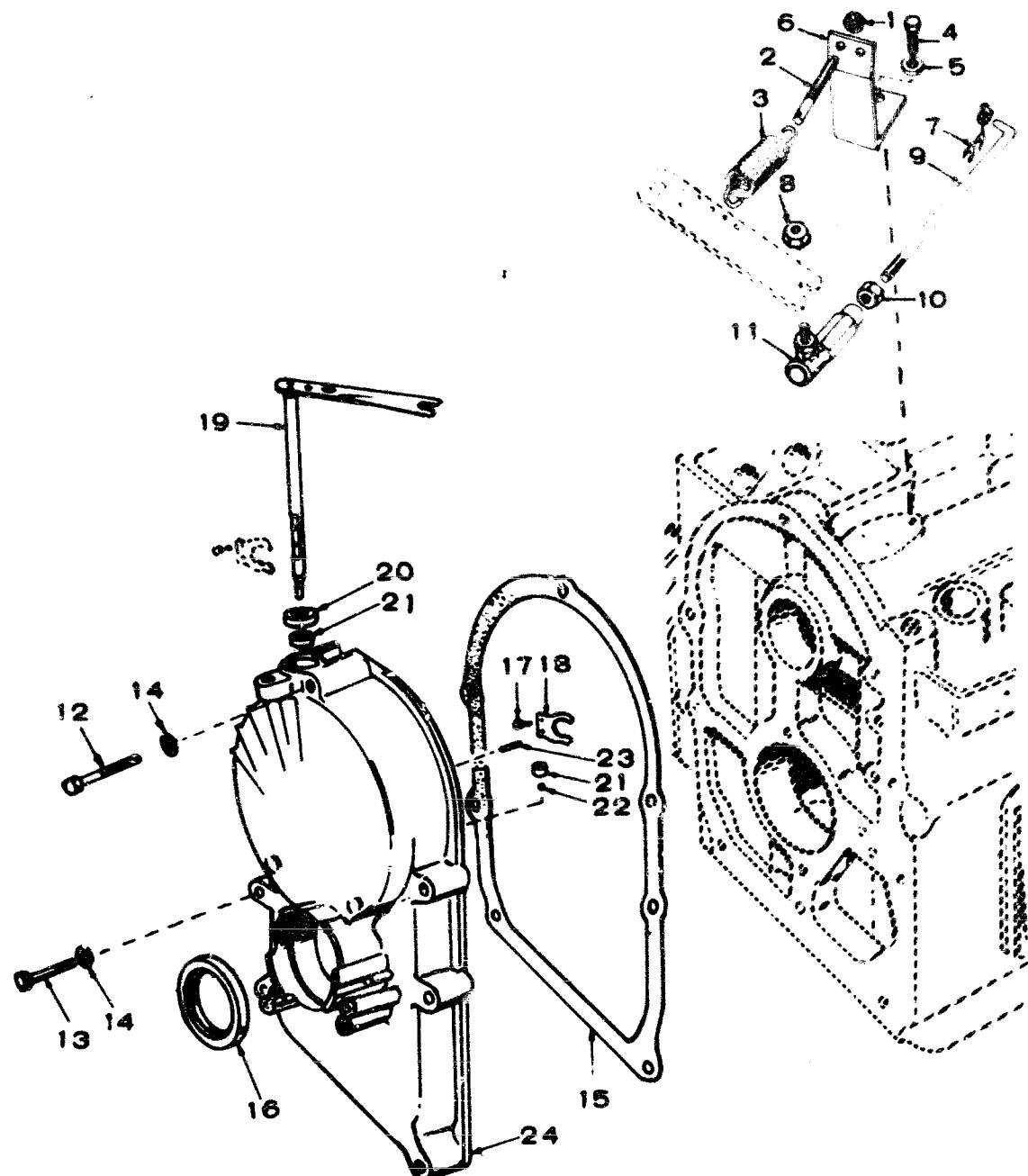
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	104-0170	1	Screw, Cap - Hex Head. Heat Treated (7/16-14 x 4")
2	850-0055	1	Washer, Lock - Spring (7/16)
3	526-0017	1	Washer, Flat (15/32" I.D. x 1-1/4" O.D. x 1/4" Thk)
4	134-3204	1	Flywheel
5	518-0014	1	Ring, Retaining
6	104-0043	1	Washer, Gear
7	104-0032	1	Gear, Crankshaft
8	515-0227	1	Kit, Flywheel
9	515-0001	1	Key, Crankshaft Gear
10	104-0895	1	Crankshaft

PISTON AND ROD



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	PISTON (Includes Pin & Retaining Rings)		
	112-0134	2	Standard
	112-0134-05	2	.005" Oversize
	112-0134-10	2	.010" Oversize
	112-0134-20	2	.020" Oversize
	112-0134-30	2	.030" Oversize
	112-0134-40	2	.040" Oversize
2	112-0122	2	Pin, Piston
3	518-0311	4	Ring, Retaining
4	RING SET, PISTON		
	113-0174	2	Standard
	113-0174-05	2	.005" Oversize
	113-0174-10	2	.010" Oversize
	113-0174-20	2	.020" Oversize
	113-0174-30	2	.030" Oversize
	113-0174-40	2	.040" Oversize
5	ROD, CONNECTING (Includes Bolt and Nut)		
	114-0225	2	Standard
	114-0225-10	2	.010" Undersize
	114-0225-20	2	.020" Undersize
	114-0225-30	2	.030" Undersize
6	114-0228	4	Bolt, Special - Connecting Rod
7	870-0137	4	Nut, Self-locking - Hex (5/16-24)

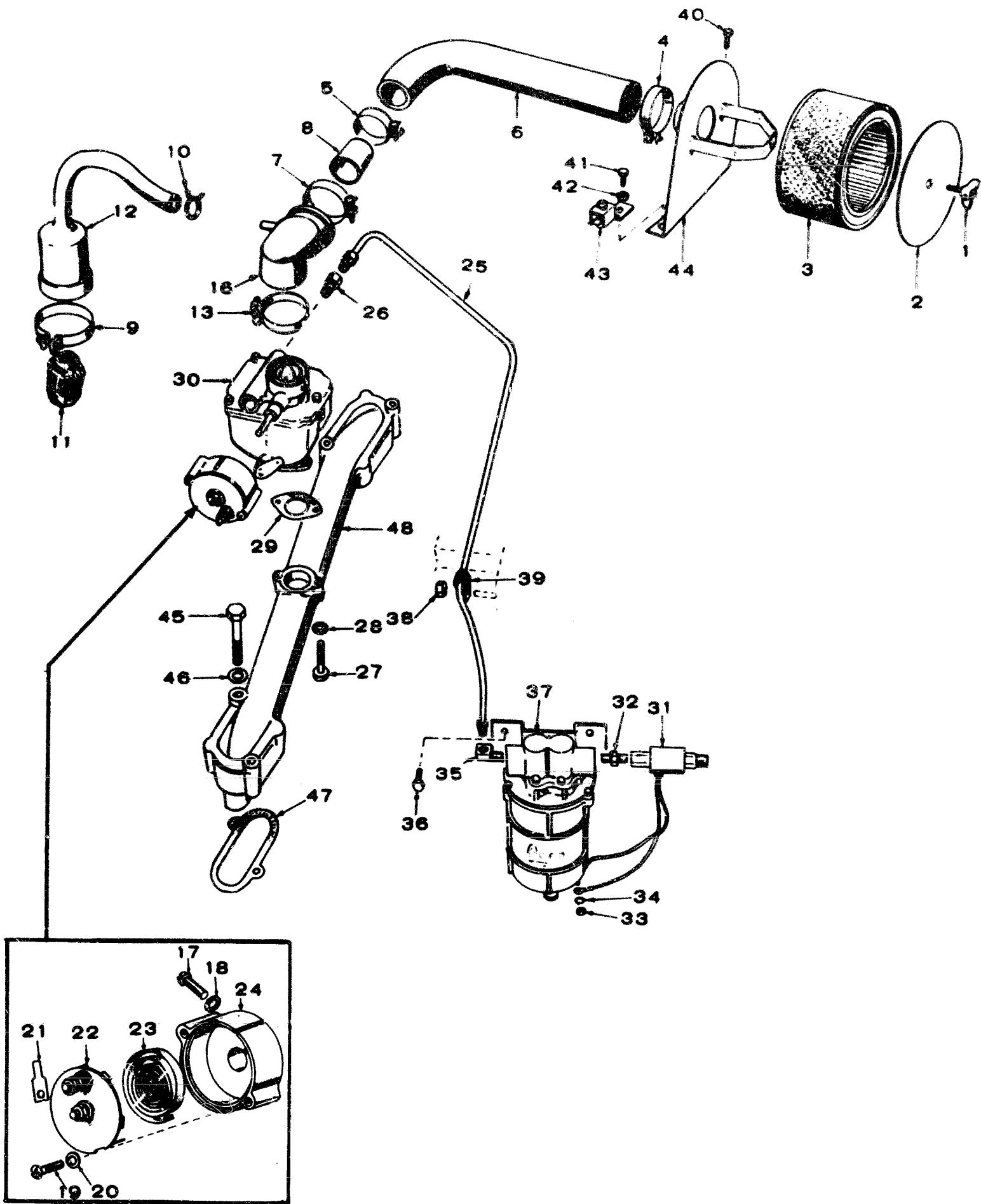
GEARCASE AND GOVERNOR



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	870-0131	1	Nut, Self-Locking (1/4-20)	13	800-0032	4	Screw, Cap - Hex Head (5/16-18 x 1-3/4")
2	150-0796	1	Stud, Speed Adjustment	14	526-0065	5	Washer, Flat - Copper (5/16)
3	150-0098	1	Spring, Governor	15	103-0408	1	Gasket, Gearcase
4	800-0004	2	Screw, Cap - Hex Head (1/4-20 x 5/8")	16	509-0040	1	Seal, Oil
5	526-0063	2	Washer, Flat - Copper (1/4)	17	815-0046	2	Screw, Machine - Pan Head (#8-32 x 3/8")
6	150-0159	1	Bracket, Governor	18	150-1187	1	Yoke, Governor
7	518-0006	1	Clip, Retaining - Rod End	19	150-1542	1	Arm and Shaft Assembly - Governor
8	870-0131	1	Nut, Self-Locking (1/4-20)	20	509-0008	1	Seal, Oil
9	150-0629	1	Rod - Governor Arm to Carburetor	21	510-0013	2	Bearing, Needle
10	870-0053	1	Nut, Hex (#10-32)	22	510-0014	1	Ball, Bearing
11	150-0639	1	Ball Joint	23	516-0130	1	Pin, Straight, Headless
12	800-0034	1	Screw, Cap - Hex Head (5/16-18 x 2-1/4")	24	103-0519	1	Cover Assembly, Gear (Includes Parts Marked *)

* - Parts included in 103-0519 Gear Cover Assembly.

FUEL SYSTEM



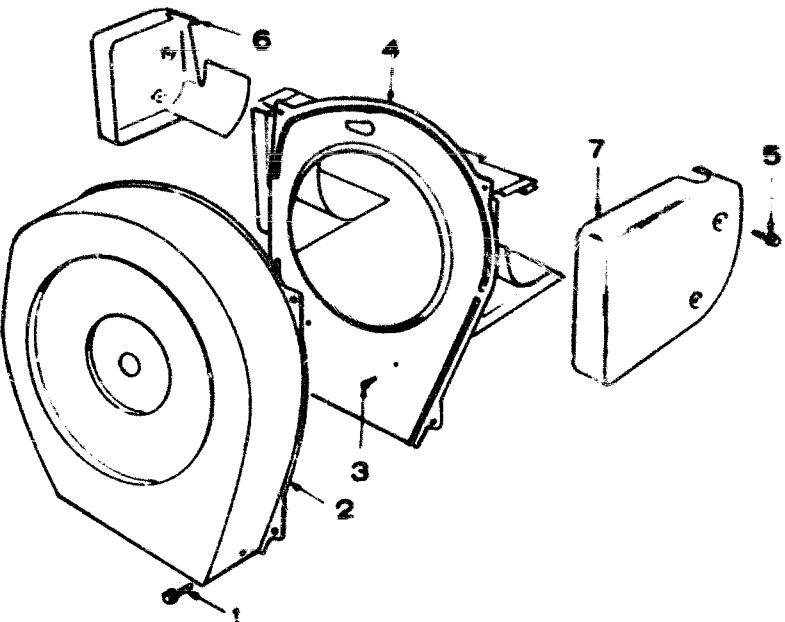
FUEL SYSTEM

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	518-0056	1	Screw, Wing (#10-32 x 1/2")	27	800-0023	2	Screw, Cap - Hex Head (1/4-20 x 1-3/8")
2	140-1153	1	Cover, Air Cleaner	28	850-0040	2	Washer, Lock - Spring (1/4")
3	140-0495	1	Cartridge, Air Cleaner	29	141-0078	1	Gasket - Carburetor to Manifold
4	503-0004	1	Clamp, Hose	30	142-0575	1	Carburetor, Gasoline
5	503-0311	1	Clamp, Hose	31	307-1457	1	Valve, Solenoid - Full Cutoff
6	503-0643	1	Hose (Preformed) - Air Cleaner	32	502-0032	1	Nipple, Pipe - Hex
7	503-0280	1	Clamp, Hose	33	860-0008	1	Nut, Hex (#8-32)
8	140-0211	1	Sleeve, Air Cleaner Hose	34	850-0025	1	Washer, Lock - Spring (#8)
9	503-0107	1	Clamp, Hose	35	502-0002	1	Elbow, Pipe
10	518-0358	1	Clamp, Hose	36	821-0009	2	Screw, Self-Locking - Hex Washer Head (1/4-20 x 3/8")
11	123-0865	1	Filler, Breather Hose	37	149-1553	1	EPump, Fuel (Facet)
12	123-1288	1	Tube, Breather (Preformed)	38	862-0015	1	Nut, Hex (5/16-18)
13	503-0107	1	Clamp, Tube	39	518-0350	1	Clamp, Loop - Insulated
				40	821-0009	1	Screw, Self-Locking - Hex Washer Head (1/4-20 x 3/8")
16	145-0489	1	Adapter, Inlet - Carburetor Air	41	821-0019	1	Screw, Self-Locking - Hex Washer Head (1/4-20 x 1/2")
17	815-0110	1	Screw, Machine - Fillister Head (#10-32 x 7/8")	42	856-0006	1	Washer, Lock - External/Internal Tooth (1/4")
18	850-0030	1	Washer, Lock - Spring (#10)	43	332-0142	1	Terminal, Lug - Ground
19	815-0285	2	Screw, Machine - Round Head with External Tooth Lockwasher (#8-32 x 5/16")	44	140-1173	1	Bracket, Air Cleaner
20	526-0062	2	Washer, Flat - Brass (0.2" I.D. x 1/2" O.D. x 1/16" Thk)	45	800-0034	4	Screw, Cap - Hex Head (5/16-18 x 2-1/4")
21	332-0527	1	Terminal, Lug	46	850-0045	4	Washer, Lock - Spring (5/16)
22	153-0114	1	Cover, Choke	47	154-1446	2	Gasket - Intake Manifold
23	153-0017	1	Element, Thermo - Choke	48	154-1468	1	Manifold, Intake
24	153-0058	1	Housing, Choke				
25	149-1417	1	Line, Fuel				
26	502-0003	1	Reducer, Pipe				

£ - See Separate Group for Components of original
Fuel Pump (Walbro).

HOUSING

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	821-0008	4	Screw, Self-Locking - Hex Head (1/4-20 x 5/16")
2	134-3149	1	Scroll Assembly (Includes Guard)
3	815-0261	2	Screw, Tapping - Hex Washer Head (1/4-20 x 7/16")
4	134-3174	1	Backplate, Scroll
5	815-0261	4	Screw, Tapping - Hex Washer Head (1/4-20 x 7/16")
6	134-3127	1	Housing, Cylinder Air - LH
7	134-3132	1	Housing, Cylinder Air - RH



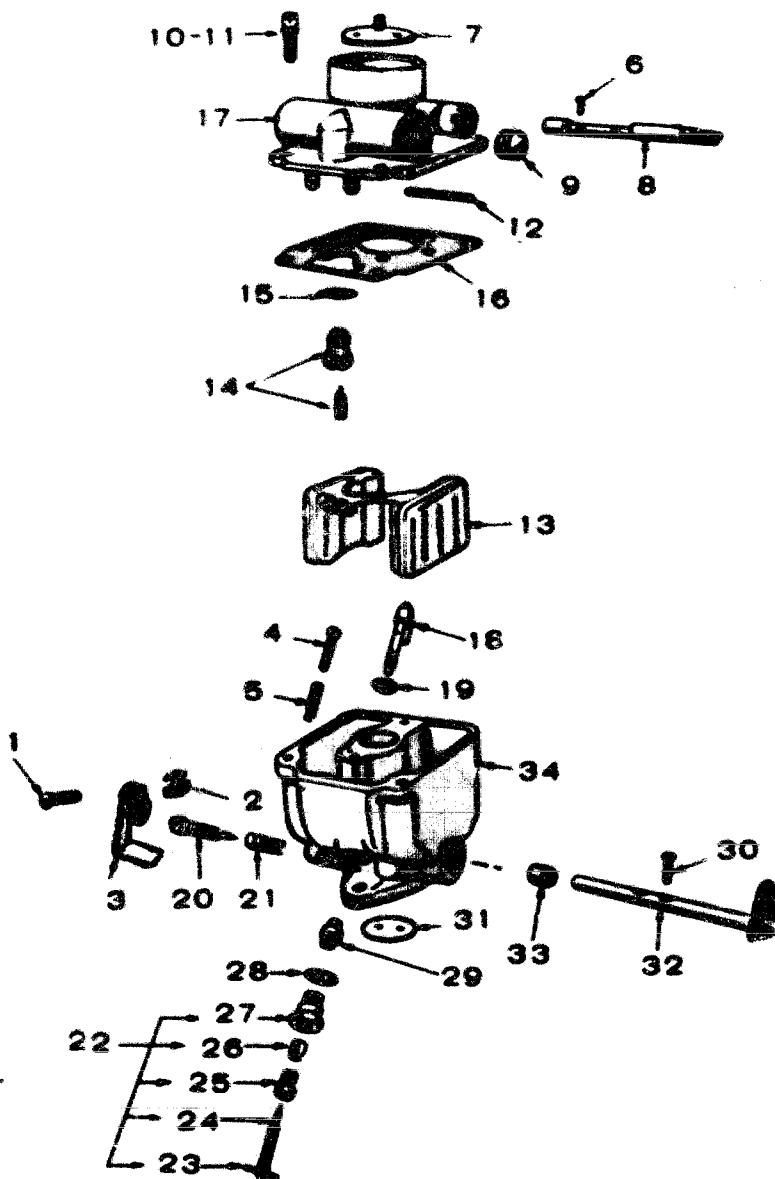
CARBURETOR PARTS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	142-0575	1	Carburetor - Gasoline
	142-0033	1	Kit, Gasket (Includes Parts Marked †)
	142-0371	1	Kit, Repair (Includes Parts Marked £)
1	813-0102	1	Screw, Machine - Round Head (#10-32 x 5/8")
2	881-0008	1	Nut, Square (#10-32)
3	145-0445	1	Lever, Stop - Throttle
4	812-0065	1	Screw, Machine - Round Head (#8-32 x 5/8")
5	142-0035	1	Spring - Throttle Stop Adjusting Screw
6	815-0091	2	Screw, Machine - Filter Head with Internal Tooth Lockwasher (#4-40 x 3/16")
7	142-0037	1	Fly, Choke
8	142-0183	1	Shaft, Choke
9	505-0053	1	Plug, Pipe - Brass
10	815-0103	1	Screw, Machine - Round Head (#10-24 x 1/2")
11	815-0109	2	Screw, Machine - Round Head (#10-24 x 5/8")
12	142-0039	1	Shaft, Float
13	142-0038	1	Float & Lever Assembly
14	142-0049	1	Valve & Seat Assembly
15	148-0017	1	†Gasket - Float Valve
16	142-0031	1	†Gasket - Cover to Body
17	142-0205	1	Cover, Carburetor
18	142-0285	1	Nozzle, Main
19	142-0032	1	†Gasket, Main Nozzle
20	142-0040	1	†Needle, Idle Adjusting
21	142-0282	1	Spring - Idle Adjusting Needle
22	142-0042	1	Needle Assembly (Includes Parts Marked †)
23	516-0027	1	*Pin, Main Adjusting Needle
24	142-0041	1	*Needle, Main Adjusting
25	142-0045	1	*Retainer, Main Adjusting Needle
26	142-0206	1	*Packing Main Adjusting Needle
27	142-0046	1	*Retainer, Main Adjusting Needle
28	148-0017	1	†Gasket - Needle Assembly
29	142-0370	1	Jet - Main Adjusting Needle
30	815-0072	2	†Screw, Machine - Oval Head (#4-40 x 1/4")
31	142-0369	1	Fly, Throttle
32	142-0368	1	Shaft, Throttle
33	142-0343	1	Bushing, Sleeve - Throttle Shaft
34		1	Body, Carburetor (Not Sold Separately)

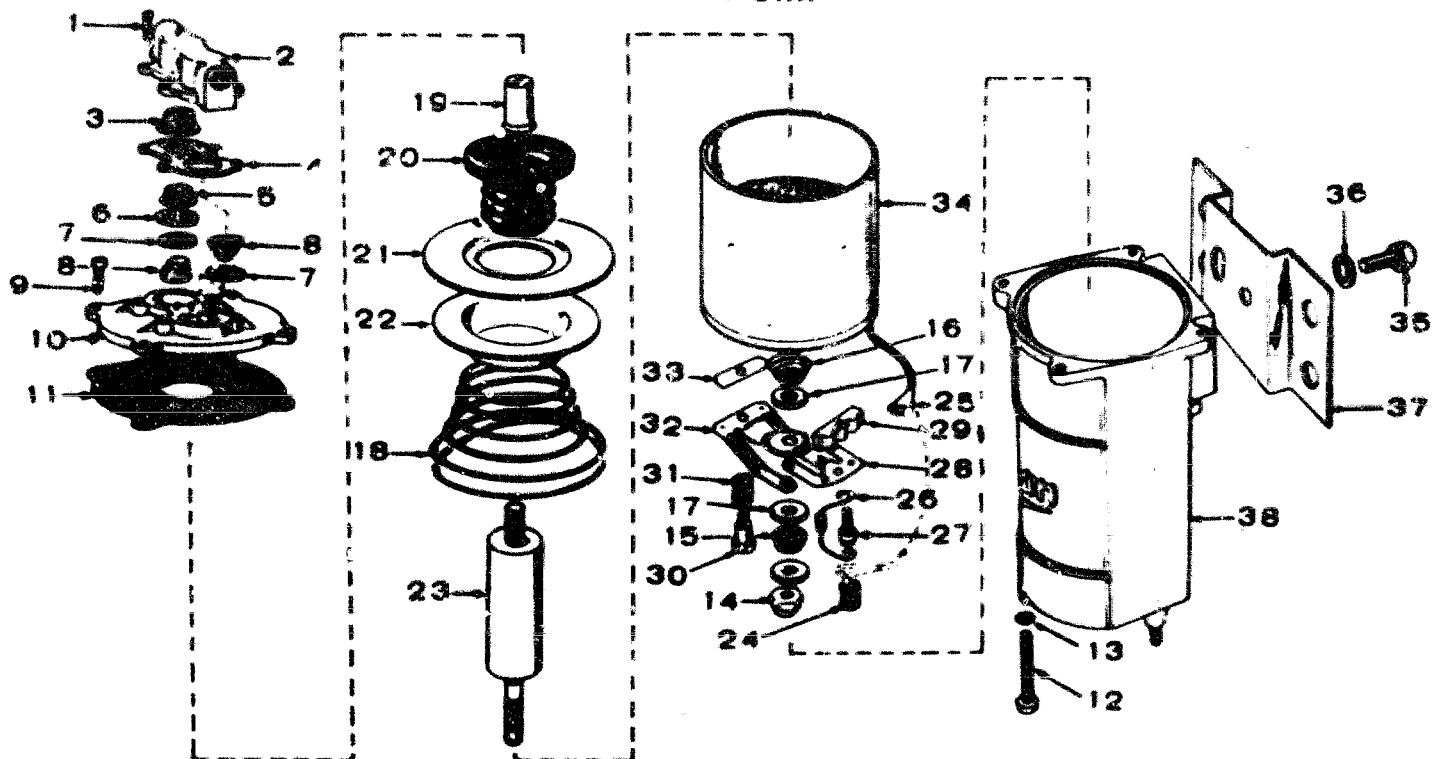
* - Included in Main Adjusting Needle Assembly #142-0042.

† - Included in Gasket Kit #142-0033.

£ - Included in Carburetor Repair Kit #142-0371.



FUEL PUMP



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
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NOTE: These Fuel Pump parts are for the original equipment pump (Walbro). For replacement pump a 149-1553 (Facet) pump is supplied.

149-1553	1	1	Pump, Fuel - Replacement (Facet)
1	#	4	Screw, Fillister Locking Head, Cross-Recessed, Steel (8-32 x 3/8")
2	£	1	Valve Cap, Pump
3	149-1397	1	Screen, Filter (7/8" Dia.)
4	149-1399	1	Gasket, Cap to Housing, Valve
5	149-1398	1	Screen, Filter (5/8" Dia.)
6	£	1	Seat, Valve, Pump
7	149-1400	2	Disc, Valve, Pump
8	£	2	Spring, Valve, Pump
9	#	4	Screw, Fillister Locking Head, Cross-Recessed, Steel (8-32 x 3/8")
10	£	1	Housing, Valve, Pump
11	149-1401†	1	Gasket, Valve Housing to Pump Body
12	#	2	Screw, Binder Head, Cross-Recessed, Steel (8-32 x 15/16")
13	#	2	Washer, Flat, Fiber (No. 8)
14	£	1	Nut, Hex, Acorn, Sheet Metal (No. 8)
15	£	1	Spring, Helical, Compression (Barrel Shaped)
16	£	1	Spring, Helical, Compression (Flat Coil)
17	£	3	Washer, Insulating, Nylon (No. 8)
18	†	1	Spring, Helical, Compression (Bellows Pressure)
19	†	1	Nut, Retaining, Bellows
20	†	1	Bellows, Fuel Pump

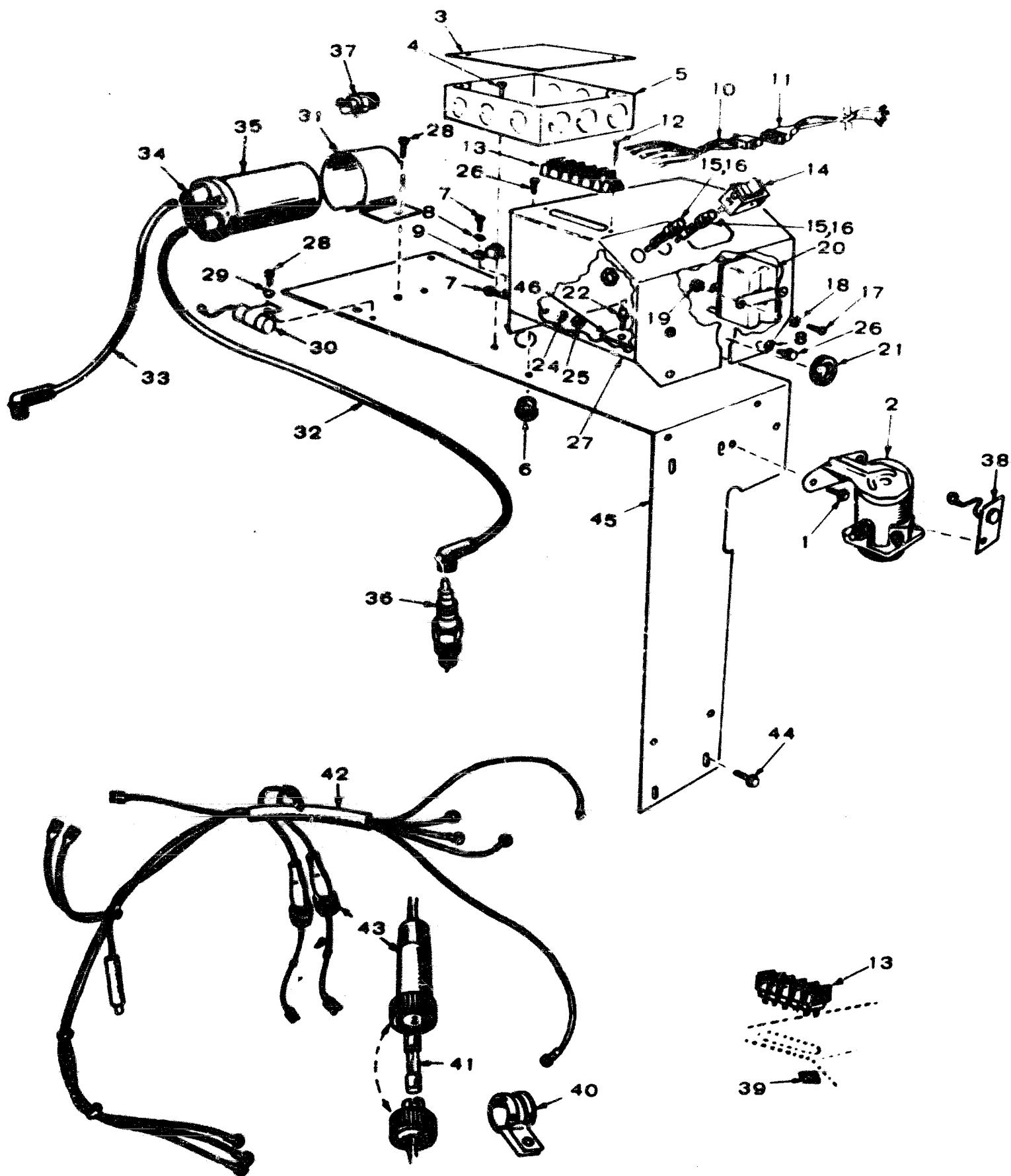
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
21	£	1	Plate, Retaining, Bellows
22	£	1	Plate, Retaining, Spring
23	£	1	Armature, Fuel Pump
24	£	1	Spring, Helical, Compression (Electrical Connection)
25	£	1	Lug, Terminal (Coil Lead)
26	£	1	Diode
27	£	1	Screw, Special, Nylon
28	£	1	Plate, Terminal, Point
29	£	1	Insulator, Spacer
30	£	1	Screw, Binder Head, Slotted, Shoulder, Brass (8-32 x 15/16")
31	£	1	Spring, Helical, Compression (Point Damper)
32	£	1	Plate Assembly, Breaker Point
33	£	1	Insulator, Breaker Plate
34	£	1	Coil Assembly, Fuel Pump
35	#	2	Screw, Hex Head, Steel (1/4-20 x 1/2")
36	#	2	Washer, Lock, Steel (1/4")
37	£	1	Bracket, Fuel Pump Mounting
38	£	1	Case, Fuel Pump Body
	149-1396	1	Repair Kit, Bellows (Includes Parts Marked †)

£ - Original Equipment Parts, Not Sold Separately:
Order Complete Pump for Replacement.

† - Parts Included in Bellows Repair Kit.

- Standard Hardware Parts, Procure Locally.

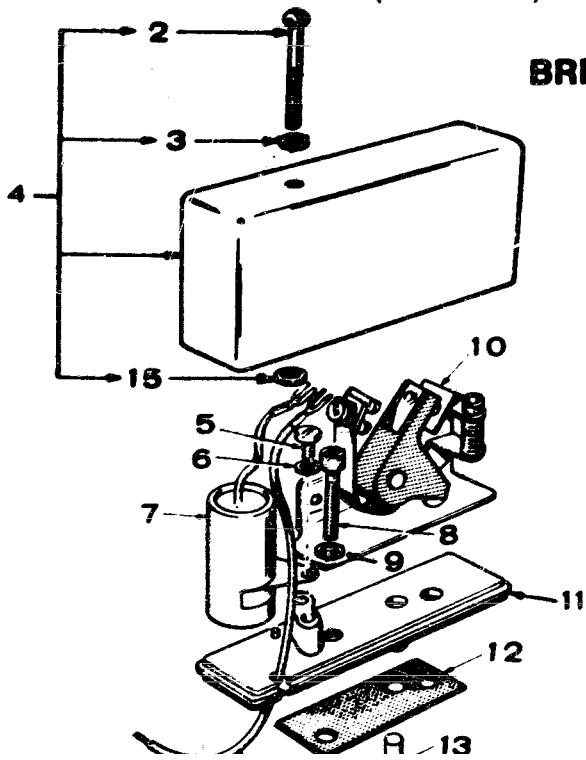
CONTROL—IGNITION



CONTROL-IGNITION

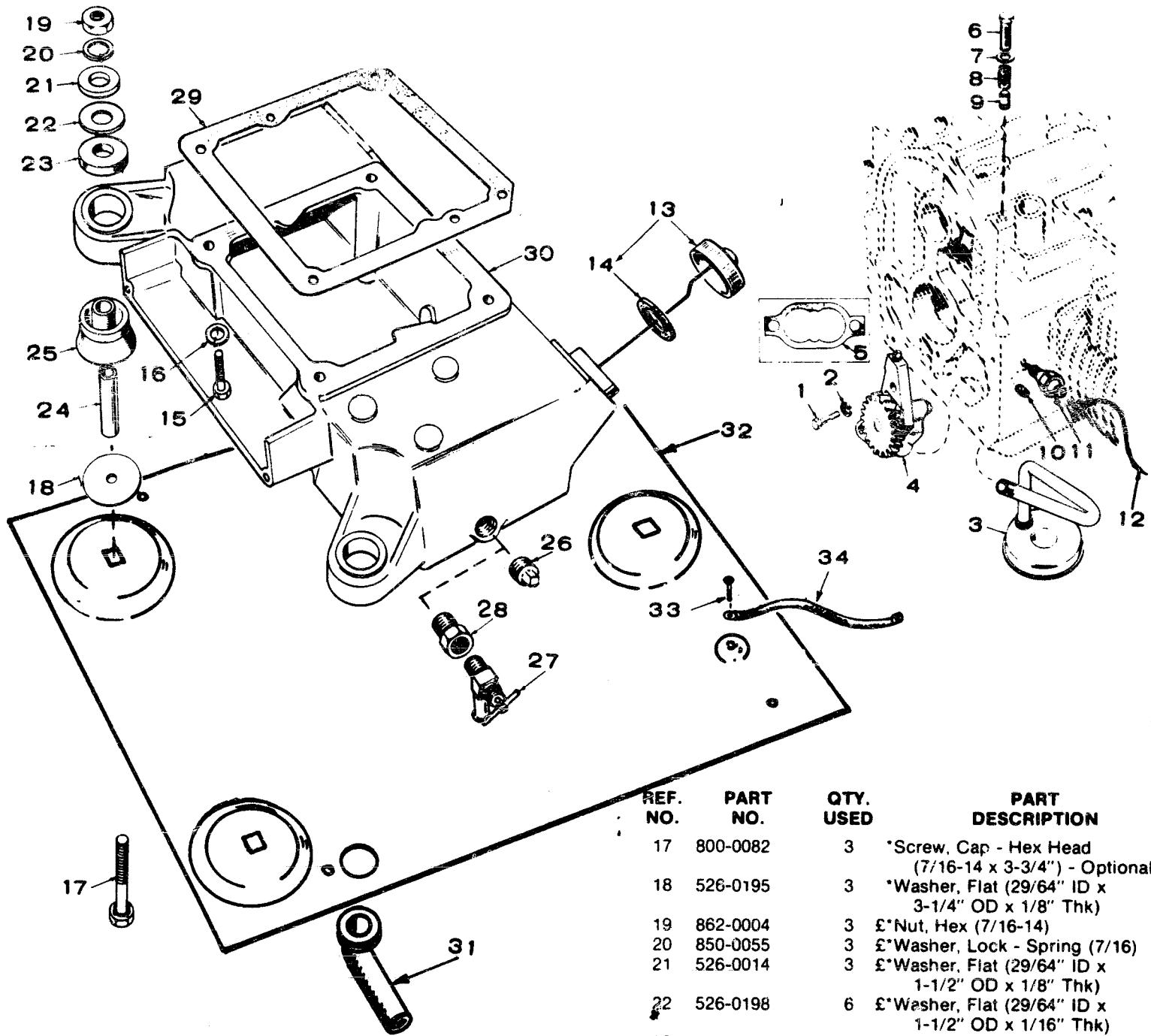
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	
1	821-0009	2	Screw, Self-locking - Hex Head (1/4-20 x 3/8")	27	CONTROL, BOX			
2	RELAY, SOLENOID			301-3877	1	Spec A Only		
307-0845	1	Spec A Only		301-4038	1	Begin Spec B		
307-1498	1	Begin Spec B		28	815-0350	2	Screw, Tapping - Hex Head (#10-32 x 3/8")	
3	330-0006	1	Cover, Outlet Box	29	856-0003	1	Washer, Lock - External/ Internal Tooth (#10)	
4	815-0350	2	Screw, Tapping - Hex Head (#10-32 x 3/8")	30	312-0027	1	Capacitor, Ignition (0.5 Mfd)	
5	330-0028	1	Box, Outlet	31	166-0588	1	Clamp, Coil	
6	508-0191	1	Grommet, Nylon	32	LEAD, ELECTRICAL - SPARK PLUG (RH)			
7	821-0010	3	Screw, Self-locking - Hex Head (1/4-20 x 1/2")	167-1557	1	14-1/2" lg, Spec A Only		
8	856-0006	3	Washer, Lock - External/ Internal Tooth (1/4")	167-1574	1	*17-1/2" lg, Begin Spec B		
9	332-0142	1	Terminal, Lug - Solderless	33	LEAD, ELECTRICAL - SPARK PLUG (LH)			
10	338-0958	1	Harness, Wiring - Remote Control (Optional)	167-1520	1	7-1/2" lg, Spec A Only		
11	HARNESS, WIRING — REMOTE CONTROL (Optional)			167-1521	1	*7-1/4" lg, Begin Spec B		
338-0959	1	10 ft. lg		34	CAP/NIPPLE, IGNITION COIL TERMINALS			
338-0960	1	30 ft. lg		160-0604	2	* Cap - Spec A Only		
12	815-0388	2	Screw, Tapping - Pan Head (#6-32 x 1/2") - Begin Spec B	160-0558	2	* Nipple - Begin Spec B		
13	TERMINAL, STRIP			35	COIL, IGNITION			
332-1650	1	Spec A Only		166-0535	1	Spec A Only		
332-1918	1	Begin Spec B		166-0643	1	Begin Spec B		
14	308-0383	1	Switch, Push - SPDT	36	167-0237	2	Spark Plug	
15	321-0174	2	Fuse, Cartridge (5 Amp, 32 Volt) - Begin Spec B	37	508-0179	1	Clamp, Cable - Strain Relief - Optional	
16	321-0217	2	Fuseholder - Begin Spec B	38	358-0072	1	Diode & Heatsink - Spec A Only	
17	822-0032	3	Screw, Machine - Pan Head (#6-32 x 1/2") - Begin Spec B	39	332-1646	2	Clip, Retaining - Terminal Strip - Spec A Only	
18	853-0003	2	Washer, Lock - External Tooth (#6) - Begin Spec B	40	332-1876	1	Clamp, Cable	
19	870-0183	2	Nut, Hex with External Tooth Lockwasher (#6-32) - Begin Spec B	41	321-0194	2	Fuse, Cartridge (9 Amp, 32 Volt) - Spec A Only	
20	307-1497	1	Relay, Armature - SPST (8 Amp, 12 Volt) - Begin Spec B	42	HARNESS, WIRING - SET			
21	508-0008	1	Grommet, Rubber - Begin Spec B	338-0955	1	Spec A Only, Includes Fuseholders		
22	305-0235	1	Diode, Rectifier (500 PIV, 22 Amp) - Begin Spec B	338-0938	1	Begin Spec B		
24	853-0013	1	Washer, Lock - External Tooth (1/4")	43	321-0193	2	Fuseholder (Part of Harness) - Spec A Only	
25	862-0001	1	Nut, Hex (1/4-20)	44	821-0010	6	Screw, Self-locking - Hex Head (1/4-20 x 3/8")	
26	815-0350	4	Screw, Tapping - Hex Head (#10-32 x 3/8")	45	BRACKET, MOUNTING - CONTROL			
				301-3878	1	Spec A Only		
				301-4039	1	Begin Spec B		
				46	370-1002	1	Bracket, Angle - Diode Mounting	
							- Part of Spark Plug Electrical Lead.	
							+ Part of Ignition Coil #160-0535.	

BREAKER BOX ASSEMBLY



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	160-1210	1	Box Assembly, Breaker (Includes Parts Marked *)
2	812-0108	1	*Screw, Machine - Round Head (#10-24 x 1-1/2")
3	526-0008	1	*Washer, Flat (13/64" I.D. x 7/16" O.D. x 1/32" Thk)
4	160-1232	1	*Cover, Breaker Box (Includes Screw, Washer and Retainer)
5	815-0358	1	*Screw, Tapping - Hex Head (#8-32 x 5/16")
6	850-0025	1	*Washer, Lock - Spring (#8)
7	312-0196	1	*Capacitor, Ignition - 30 MFD
8	802-0034	2	*Screw, Cap - Socket Head (1/4-20 x 3/4")
9	850-0038	2	*Washer, Lock - Spring (1/4")
10	160-1183	1	*Point Assembly, Breaker
11	160-1219	1	*Base, Breaker Box
12	160-1150	1	*Gasket, Breaker Box
13	160-1151	1	Plunger, Breaker Point Assy.
14	336-2378	1	Lead, Electrical - Coil to Breaker Points
15	509-0065	1	Retainer, Cover Mounting

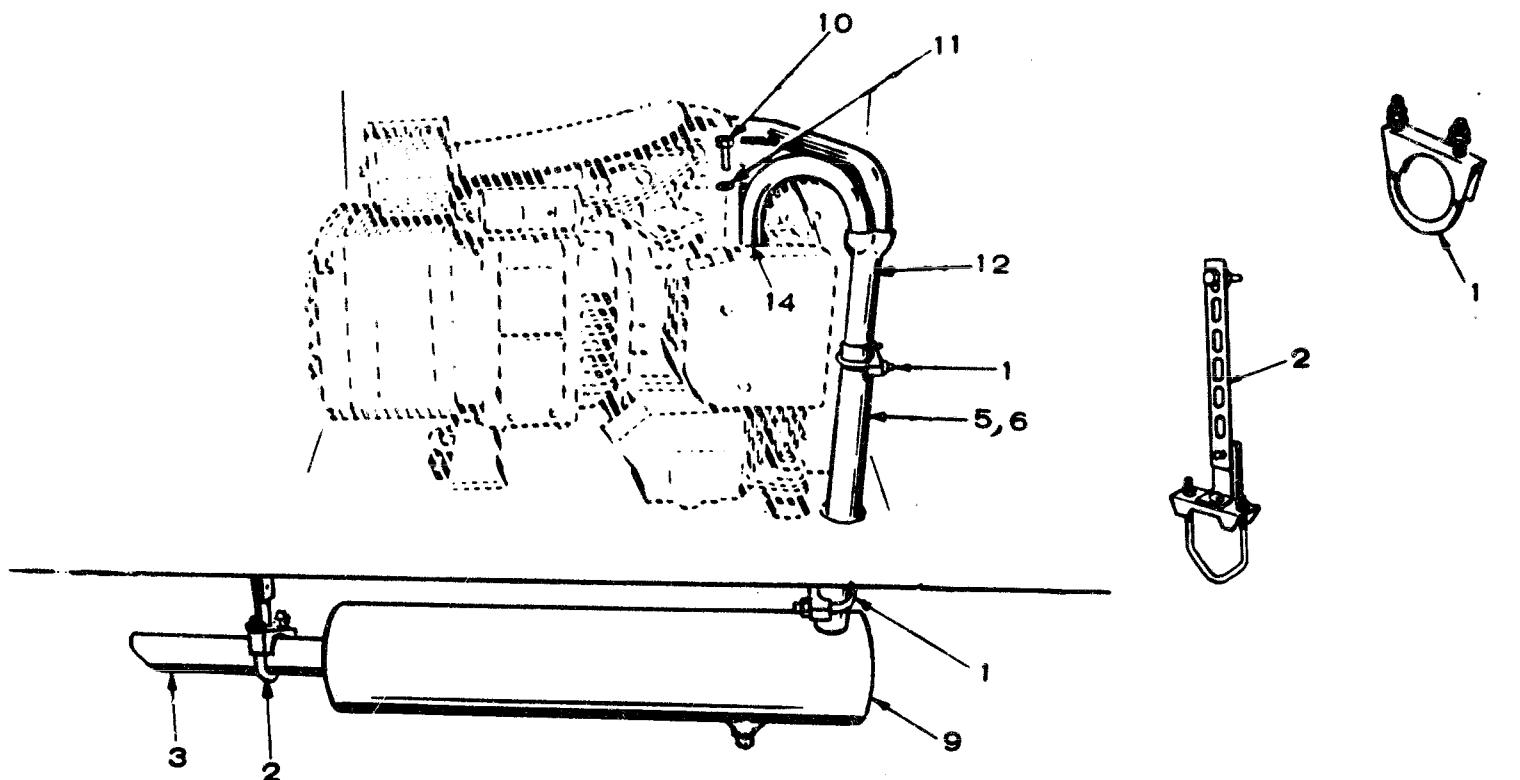
OIL SYSTEM AND MOUNTING PLATE



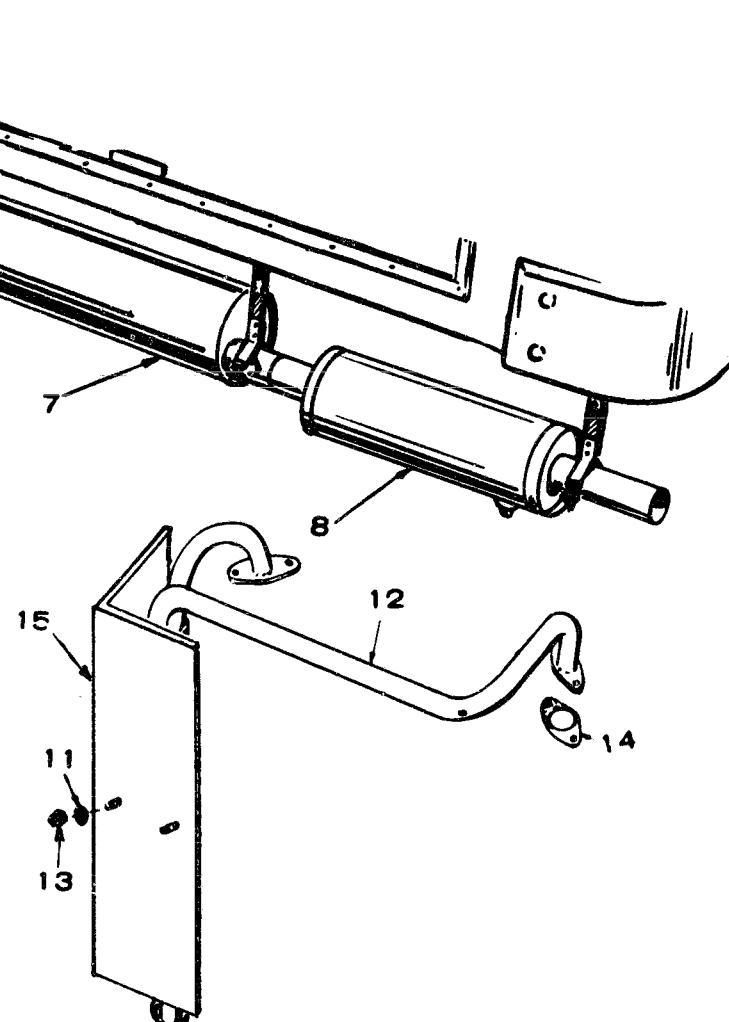
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0007	2	Screw, Cap - Hex Head (1/4-20 x 1")
2	850-0040	2	Washer, Lock - Spring (1/4)
3	120-0648	1	Cup, Oil Pump Intake
4	120-0491	1	Pump, Oil
5	120-0161	1	Gasket Kit - Oil Pump
6	801-0050	1	Screw, Cap - Hex Head (3/8 x 24 x 1")
7	526-0066	1	Washer, Flat - Copper (3/8)
8	120-0140	1	Spring - Oil Bypass Valve
9	120-0398	1	Valve - Oil Bypass
10	502-0080	1	Plug, Pipe - 3/8 - Optional
11	309-0237	1	Switch, Low Oil Pressure
12	309-2379	1	Lead, Electrical - Low Oil Pressure Switch
13	123-0489	1	Cap & Indicator, Oil Fill
14	123-0191	1	Gasket, Oil Fill Cap
15	800-0051	4	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
16	850-0050	4	Washer, Lock - Spring (1/4)

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17	800-0082	3	*Screw, Cap - Hex Head (7/16-14 x 3-3/4") - Optional
18	526-0195	3	*Washer, Flat (29/64" ID x 3-1/4" OD x 1/8" Thk)
19	862-0004	3	£*Nut, Hex (7/16-14)
20	850-0055	3	£*Washer, Lock - Spring (7/16)
21	526-0014	3	£*Washer, Flat (29/64" ID x 1-1/2" OD x 1/8" Thk)
22	526-0198	6	£*Washer, Flat (29/64" ID x 1-1/2" OD x 1/16" Thk)
23	402-0282	3	£*Snubber
24	402-0290	3	£*Spacer, Sleeve
*CUSHION, VIBRATION			
	402-0283	2	Engine End
	402-0284	1	Generator End
	505-0056	1	Plug, Pipe (1/2") (Used on Some Models)
	504-0092	1	Valve, Oil Drain
	505-0019	1	Reducer, Pipe (1/2" to 3/8")
	102-0693	1	Gasket, Oil Base
	102-0801	1	Base, Oil
	122-0345	1	Hose, Oil Drain - Optional
	403-1219	1	Plate, Mounting
	815-0194	1	Screw, Tapping - Hex Head with External Tooth Lockwasher (10-32 x 3/8")
	337-0095	1	Strap, Electrical - Grounding
	816-0206	3	£Bolt, Carriage (7/16-14 x 3-1/2")
HARDWARE PACKAGE, MOUNTING			
	402-0435	1	Used with Mounting Plate (Includes Parts Marked £)
	402-0434	1	Sets Without Mounting Plate - Optional (Includes Parts Marked *)

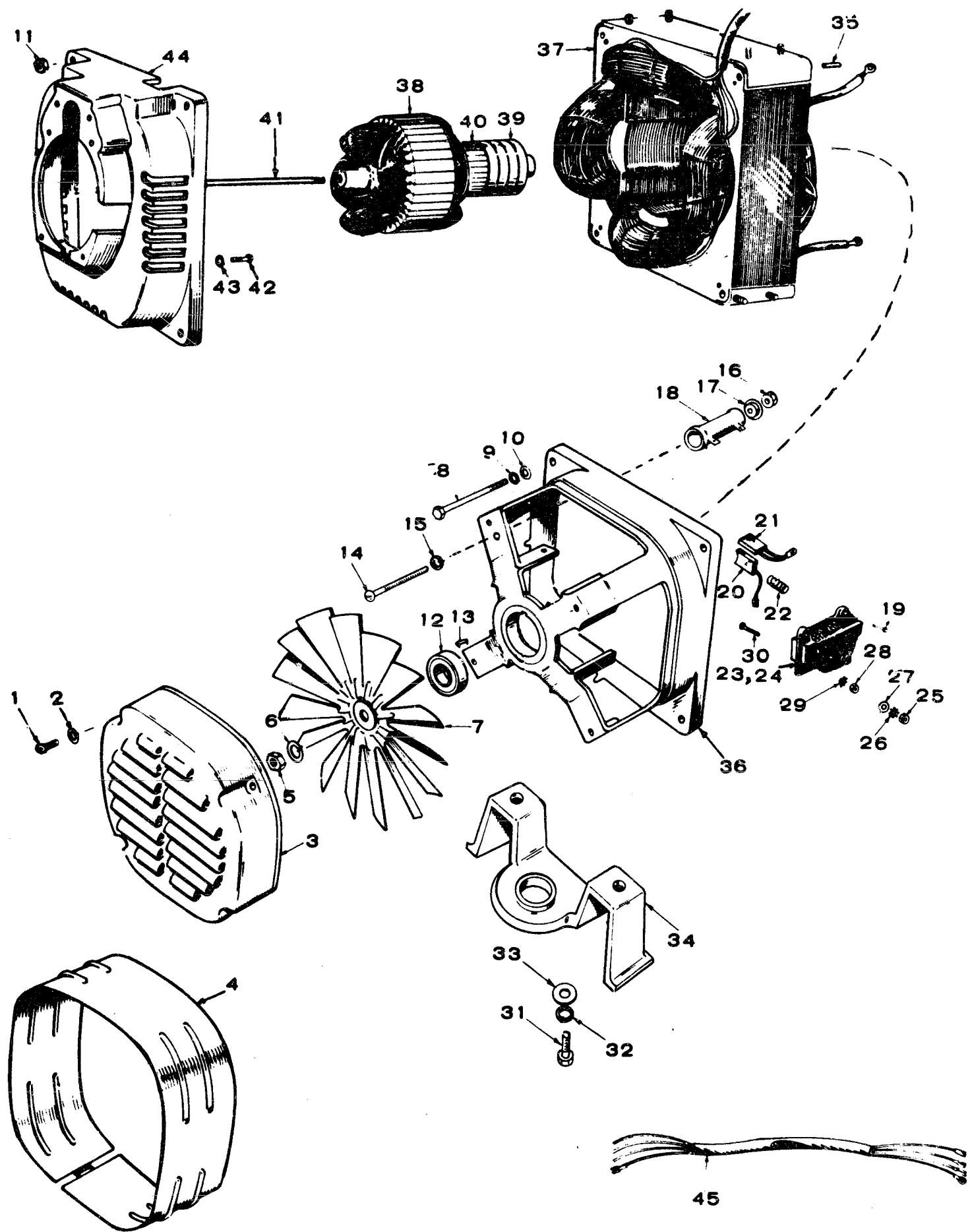
EXHAUST SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	155-1239	2	Clamp, Muffler (1-5/8" Pipe)
2	155-1234	1	Bracket, Hanger - Muffler
3	155-1235	1	Tube, Exhaust (1-1/2" x 19") - Optional
5	155-1240	1	Tube, Exhaust (1-5/8" x 15") - Optional
6	154-1578	1	Tube, Exhaust - Manifold Extension (1-5/8" x 18")
7	155-1222	1	Muffler, Exhaust - Side Inlet (21-9/16" Lg)
8	155-1254	1	Spark Arrestor-Optional
9	155-1258	1	Muffler/Spark Arrestor - Side Inlet-Optional
10	800-0026	4	Screw, Cap - Hex Head (5/16-18 x 3/4")
11	850-0045	8	Washer Lock - Spring (5/16)
12	154-1762	1	Manifold, Exhaust - Left Side Down
13	867-0002	2	Nut, Hex (5/16-24) - Use with Optional Heat Shield
14	154-1725	2	Gasket, Exhaust Manifold
15	155-1380	1	Shield, Exhaust Tube -



GENERATOR



GENERATOR

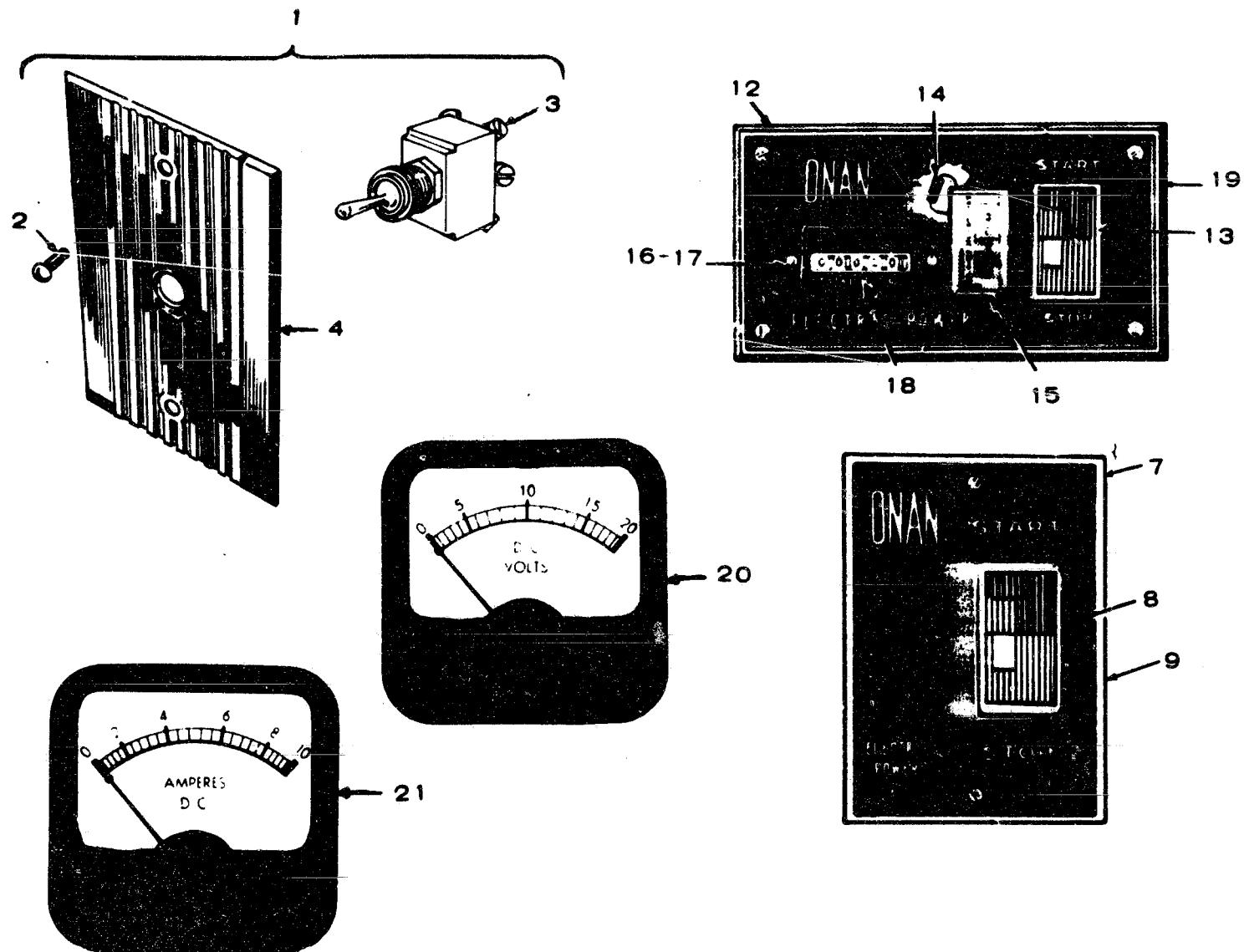
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	812-0156	2	Screw, Machine - Round Head (1/4-20 x 1-1/2")	25	871-0010	4	+ Nut, Hex - Brass (#10-32)
2	850-0040	2	Washer, Lock - Spring (1/4)	26	853-0008	4	+ Washer, Lock - External Tooth (#10)
3	232-2107	1	Cover, Generator	27	526-0049	4	+ Washer, Flat - Brass (#10)
4	234-0362	1	Wrapper, Generator	28	871-0010	4	+ Nut, Hex - Brass (#10-32)
5	870-0203	1	Nut, Hex (7/16-20)	29	853-0008	4	+ Washer, Lock - External Tooth (#10)
6	850-0055	1	Washer, Lock - Spring (7/16)	30	815-0341	4	+ Screw, Machine - Hex Head, Brass (#10-32 x 1")
7	205-0090	1	Fan, Generator	31	800-0051	2	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
8	800-0043	4	Screw, Cap - Hex Head (5/16-18 x 5")	32	850-0050	2	Washer, Lock - Spring (3/8)
9	850-0045	3	Washer, Lock - Spring (5/16)	33	526-0030	2	Washer, Flat (13/32" I.D. x 7/8" O.D. x 1/8" Thk)
10	526-0115	4	Washer, Flat (11/32" I.D. x 11/16" O.D. x 1/16" Thk)	34	232-2619	1	Support, Generator
11	862-0015	4	Nut, Hex (5/16-18)	35	516-0182	8	Pin, Straight, Headless
12	510-0047	1	Bearing, Ball (Part of Armature Assembly)	36	211-0187	1	End Bell, Generator
13	232-0596	1	Clip, Retaining - Bearing	37	STATOR, GENERATOR		
14	812-0092	1	Screw, Machine - Round Head (#8-32 x 2-3/4")	220-1818		1	50 Hertz Sets
15	850-0025	1	Washer, Lock - Spring (#8)	220-1820		1	60 Hertz Sets
16	860-0008	1	Nut, Hex (#8-32)	38	ARMATURE ASSEMBLY, GENERATOR (Includes Parts Marked *)		
17	304-0014	1	Washer, Centering - Resistor	201-2406		1	50 Hertz Sets
18	353-0057	1	Resistor, Wirewound - 3.4-Ohm, 75 Watt, 0.2%	201-2405		1	60 Hertz Sets
19	815-0359	15	Screw, Tapping - Hex Washer Head (#10-32 x 7/8")	39	204-0110	1	Collector Ring, Generator
20	214-0095	4	Brush, Commutator	40	203-0153	1	Commutator, Generator
21	214-0096	8	Brush, Collector Ring	41	520-0732	1	Stud
22	212-1232	12	Spring, Brush	42	800-0050	4	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
23	212-0359	2	Block - Generator Brush - Bottom and Right Side (Includes Parts Marked +)	43	850-0050	4	Washer, Lock - Spring (3/8)
24	212-0360	2	Block - Generator Brush - Top and Left Side (Includes Parts Marked +)	44	231-0164	1	Adapter - Generator to Engine
				45	338-0946	1	Harness, Wiring

* - Parts included in Armature Assembly
+ - Parts included in Generator Brush Blocks.

SERVICE KITS AND MISCELLANEOUS

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	168-0123	1	Gasket Kit, Carbon Removal
	168-0124	1	Gasket Kit, Engine
	522-0281	1	Overhaul Kit
	160-1213	1	Kit, Ignition Tune-up (Top Adjusted Point Set)
	525-0305	1	Touch-up Paint (13 oz. Pressurized Can), Green

REMOTE STARTING CONTROL - OPTIONAL
(Used With Three Wire Start Circuits Only)



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	308-0165	1	Control Package - Remote Starting (Includes Parts Marked *)
2	815-0385	2	*Screw, Machine - Round Head, Black Zinc Finish (#6-32 x 1/2")
3	308-0154	1	*Switch, Toggle - SPDT
4	308-0168	1	*Plate, Mounting
7	300-0985	1	Control Assembly, Remote Starting - Standard (Includes Parts Marked *)
8	308-0341	1	*Switch, Push - DPDT (Momentary) With Intergal 12 Volt Lamp
9	301-3566	1	*Panel, Control

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
12	300-0986	1	Control Assembly Remote Starting - Deluxe (Includes Parts Marked £)
13	308-0341	1	£Switch, Push - DPDT (Momentary) With Intergal 12 Volt Lamp
14	359-0034	1	£Diode
15	302-0888	1	£Meter, Battery Condition
16	815-0385	2	£Screw, Machine - Round Head, Black Zinc Finish (#6-32 x 1/2")
17	302-0887	2	£Nut, Hex (#6-32)
18	302-0495	1	£Meter, Time Totalizing
19	302-3606	1	£Panel, Control
20	302-0562	1	Voltmeter, DC (0-20)
21	302-0561	1	Ammeter, DC (0-10)

* - Parts Included in Control Package 308-0165.
 * - Parts Included in Control Assembly 300-0985.
 £ - Parts Included in Control Assembly 300-0986.

SPECIAL PARTS LIST FOR MODEL 4.0BF-3CR SPEC 16000A
FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO.
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1123-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			

SPECIAL PARTS LIST FOR MODEL 3.0BF-53CR SPEC 16000B
 FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
 (PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1127-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			

SPECIAL PARTS LIST FOR MODEL 4.0BF-3CR SPEC 160008
FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1127-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			

SPECIAL PARTS LIST FOR MODEL 4.0BF-8R SPEC 16000B
 FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
 (PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)
 WIRING DIAGRAM NO. (ENG)611-1127-04

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
201-2413	1	Armature Assembly, Generator			
520-0733	1	Stud, Armature Through			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			

SPECIAL PARTS LIST FOR MODEL 4.0BF-1R SPEC 16002A
 FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
 (PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)
 WIRING DIAGRAM NO. (ENC)611-1123-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
Parts Not Furnished By Onan Mounting Plate Mounting Hardware					

SPECIAL PARTS LIST FOR MODEL 4.0BF-3CR SPEC 16002B
FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1127-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			
Parts Not Furnished By Onan					
Mounting Plate					
Mounting Hardware					

SPECIAL PARTS LIST FOR MODEL 4.0BE-3CR SPEC 16004B
FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1127-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
154-1866	1	Manifold, Exhaust - Left Side Down			
154-1883	1	Bracket, Exhaust Manifold Heat Shield Mtg - Left			
154-1886	1	Bracket, Exhaust Manifold Heat Shield Mtg - Right			
154-1888	1	Shield, Heat - Exhaust Manifold			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			

SPECIAL PARTS LIST FOR MODEL 4.0BF-3CR SPEC 16856B
 FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO. -
 (PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)
 WIRING DIAGRAM NO. (ENG)611-1131-01

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
154-1837	1	Tube, Exhaust - Right Hand			
154-1838	1	Tube, Exhaust - Left Hand			
140-1344	1	Base, Air Cleaner			
123-1442	1	Tube, Breather (To Crankcase)			
123-1440	1	Connector, Breather Tubes (1" Long)			
503-0769	2	Clamp, Hose - Breather Tube Connector			
123-1441	1	Tube, Breather (To Air Cleaner)			
140-1216	1	Cartridge, Air Cleaner			
140-1295	1	Cover, Air Cleaner			
865-0020	1	Nut, Wing - Air Cleaner			
503-0189	1	Clamp, Hose - Breather Tube To Crankcase			
155-0484	2	Muffler			
502-3065	1	Elbow, Fuel Pump Outlet			
149-1417	1	Line, Fuel - Pump To Carb.			
149-1304	1	Pump, Fuel - No Longer Available - For Complete Pump Replacement Order 149-1553 Fuel Pump Kit (Kit Includes Necessary Elbows)			
301-4129	1	Cover, Control Box			
332-0050	1	Clip, Cable - Control Mounting Bracket			
301-4131	1	Box, Control			
332-0604	1	Block, Terminal - 5 Place			
508-0071	1	Grommet, Rubber - Control Box (7/8" Hole)			
508-0109	1	Grommet, Rubber - Control Box (1" hole)			
308-0345	1	Switch, Toggle - SPDT			
338-1026	1	Harness, Wiring - Control Box			
307-1619	1	Relay, Ignition - Includes Fastener			
321-0044	1	Holder, Fuse			
321-0146	1	Fuse - 10 Amp			

SPECIAL PARTS LIST FOR MODEL 4.03F-8R **SPEC** 17389B
FOR STANDARD PARTS REFER TO CATALOG 965-0220 **KEY NO.** -
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG)611-1127-04

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
150-0678	1	Clip, Sensitivity Adjustment			
149-1554	1	Line, Fuel - Pump To Carb.			
149-1541	1	Pump, Fuel			
332-0556	1	Connector - Fuel Pump Lead			
502-0196	1	Elbow, Fuel Pump Inlet			
134-3418	1	Guard, Scroll			
336-2379	1	Lead, Low Oil Pressure Switch			
201-2526	1	Armature Assembly, Generator (Also Includes Fan Hub)			
232-2586	1	Hub, Generator Fan			
520-0781	1	Stud, Armature Through			
211-0264	1	End Bell, Generator			
205-0116	1	Fan, Generator			
232-2587	1	Cover, Generator Fan			
234-0530	1	Screen, Generator Fan			
338-0947	1	Harness, Wiring - Generator To Control			
338-1132	1	Harness, Wiring - Generator Set - Includes Diode And Relay			
307-1619	1	Relay, Ignition - Includes Fastener			
870-0341	1	Fastener, Ignition Relay			

SPECIAL PARTS LIST FOR MODEL 4.0 BF-BR SPEC 20793B
FOR STANDARD PARTS REFER TO CATALOG 965-0220 KEY NO.
(PARTS CATALOG ALSO CONTAINS COMPONENTS FOR MAJOR OPTIONAL FEATURES LISTED BELOW)

WIRING DIAGRAM NO. (ENG) 611-1127-04

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
201-2527	1	Armature Assembly, Wound Extended Shaft (Includes Parts Marked *)			
510-0047	1	*Bearing, Ball			
204-0110	1	*Collector Ring, Generator			
203-0153	1	*Commutator, Generator			
338-0947	1	Harness, Wiring-Generator			
520-0733	1	Stud, Armature Thru			
516-0196	4	Pin, Dowel-End Bell			
211-0365	1	Bell, End (Includes Dowel Pins)			
212-0361	1	Block, Generator Brush-Top			
212-0345	1	Block, Generator Brush-Right Side			
212-0352	1	Block, Generator Brush-Bottom			
212-0353	1	Block, Generator Brush-Left Side			
(Note: Above 4 Brush Block Assemblies Include Parts Marked +)					
214-0096	2	+Brush, AC			
214-0095	1	+Brush, DC			
212-1232	3	+Spring, Gen. Brush			
205-0116	1	Fan, Generator			
232-2827	1	Cover, Generator Fan			